# RECLAMATION

Managing Water in the West

Regulating the Use of Colorado River Water Without an Entitlement



U.S. Department of the Interior Bureau of Reclamation

#### What is an Entitlement?

- An entitlement authorizes a person or entity to use water from the lower Colorado River for beneficial use. There are 3 forms of entitlements:
  - A decreed right as described in the Consolidated Decree
  - A contract with the Secretary of the Interior
  - A Secretarial reservation of Colorado River water.
- An entitlement specifies the quantity, purpose, and location where water may be used; also identifies the priority of the entitlement on the mainstream.
- Reclamation carries out the contracting and accounting requirements on behalf of the Secretary.

# Why is Reclamation regulating the use of Colorado River water without an entitlement?

- The Boulder Canyon Project Act (BCPA) (1928) requires Colorado River water users in the lower basin to have an entitlement.
- The Lower Division States (AZ, CA, NV) are fully utilizing their basic apportionment of 7.5 mafy.
- The entire Colorado River basin is experiencing the worst drought in 100 years of recorded history.

# Why is Reclamation regulating the use of Colorado River water without an entitlement?

- The Secretary is required by the Consolidated Decree of the U.S. Supreme Court in *Arizona* v. *California* (2006) to account for all water use within the Lower Division States, including water withdrawn by underground pumping.
- In most western river systems, including the Colorado River, wells that are hydraulically connected to the river are considered to divert water from the river itself.

# How much Colorado River water is used without an entitlement in the lower basin?

- Approximately 9,000 to 15,000 afy of lower Colorado River water is used without an entitlement.
- The largest number of users are domestic wells in the floodplain.

# Why is Reclamation using a Rulemaking Process?

- The Reclamation Act (1902) and the BCPA authorize the Secretary to prescribe rules and regulations necessary to carry out provisions of the law.
- Federal regulations developed through rulemaking have the same authority as a law.
- Federal rulemaking processes require the review and comment by Federal agencies and the public.
  - River aquifer/accounting surface methodology

#### Purpose of the rule

- Provide options for users without an entitlement to legitimize their lower Colorado River water use.
- Adopt the river aquifer/accounting surface methodology.
- Establish the criteria a water user must satisfy to demonstrate that his or her well does not pump water that would be replaced by lower Colorado River water.
- Establish a process for a water user to appeal a determination by Reclamation that their well pumps water that would be replaced by Colorado River water.

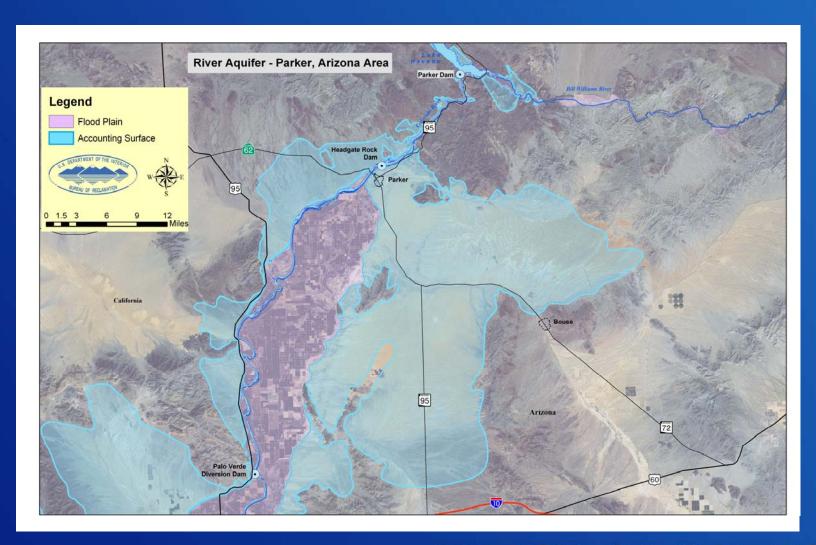
#### 113° 114° 115° UTAH River 370 **Aquifer** ARIZONA Lake Las Vegas Mead Lake Mohave Laughlin Davis Dam 35° Needles Havasu willi Lake Havasu Parker Dam Parker 34 Imperial 33° UNITED STATES MEXICO Yuma ARIZONA 50 MILES **50 KILOMETERS**

#### Lower Colorado River Aquifer

## Colorado River Aquifer

- The river aquifer is divided into two regions:
  - Floodplain: Water pumped by wells in the floodplain is presumed to be replaced by mainstream water. The definition of "Mainstream" in the proposed rule includes the floodplain.
  - Accounting surface: Wells in the accounting surface are capable of withdrawing mainstream water. A static water elevation in a well at or below the accounting surface elevation will be considered to withdraw water that will be replaced by Colorado River water.

# Colorado River Aquifer



## **Accounting Surface**

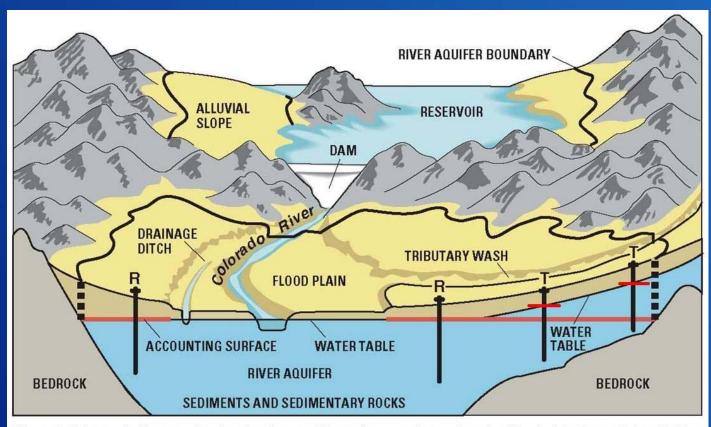


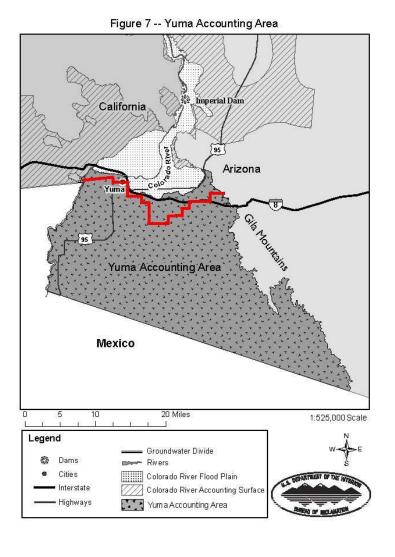
Figure 2. Schematic diagram showing the river aquifer and accounting surface (red line) of the lower Colorado River. Wells labeled "R" have a static water-level elevation equal to or below the accounting surface and are presumed to yield water that will be replaced by water from the river. Wells labeled "T" have a static water-level elevation above the accounting surface and are presumed to yield water that will be replaced by water from precipitation and inflow from tributary valleys (Modified from Wilson and Owen-Joyce, 1994).

#### Well Inventory

- The inventory is being conducted throughout the river aquifer.
- The inventory includes wells and river pumps.
- Current inventory data for domestic wells (80% complete): 4,190 (August, 2008)
  - Total number of wells in database: 10,500
  - Arizona: Wells 3,078; River pumps 123
  - California: Wells 1,112; River pumps 183
  - Nevada: Wells 0; River pumps 1 (inventory not yet conducted in Nevada).

## Yuma Accounting Area

- The Yuma accounting area is in AZ near Yuma, extending south to the Southerly International Boundary.
- A groundwater divide in the Yuma area separates the direction of groundwater flow.
  - North of the groundwater divide, groundwater flows to the Colorado River above the Northerly International Boundary.
  - South of the groundwater divide, groundwater flows toward Mexico.
- Pumping in the area that is south of the groundwater divide will not be accounted for as Colorado River water.
- Reclamation will monitor groundwater gradients to detect a change in the gradients in the future.



#### Yuma Accounting Area

# Options for Compliance with the Proposed Rule

- If your well or river pump is located within an entitlement holder's service area, you will become a customer of that entitlement holder.
- Reclamation will be working with each of the entitlement holders to ensure that the water use is correctly accounted for.

# Options for Compliance with the Proposed Rule

- <u>AZ</u>: There is a small amount of Colorado River water available for allocation.
  - If your well or river pump is located outside of an entitlement holder's service area, it may be close enough to the boundary to be included within an entitlement holder's service area. The inclusion must be approved by Reclamation.
- CA: Lower Colorado Water Supply Project.
- NV: All Colorado River water apportioned for use in NV is under permanent contract. A well or river pump owner without an entitlement must contact the Southern Nevada Water Authority.

## **Submitting Comments**

- Comments may be submitted by two methods:
  - Use of the federal rulemaking website: http://www.regulations.gov
  - By mail to: Bureau of Reclamation, P.O. Box 61470,
    Boulder City, NV 89006-1470, Attention: Area Manager,
    Mail Code BCOO-1000.
  - Include the number 1006-AA50 and the Docket ID (BOR-2008-0001) in your correspondence.
- The proposed rule language can be viewed on the federal rulemaking website, or on the Lower Colorado Region's website at:

http://www.usbr.gov/lc/region/programs/unlawfuluse.html

#### **Questions?**

**Ruth Thayer** 

Group Manager, Water Conservation and Accounting

(702) 293-8426

rthayer@lc.usbr.gov